

## **ABSTRACT**

A feedforward amplifier includes a first power splitter for dividing an input signal into two paths. The first path, in sequence, includes a first vector adjuster, a main amplifier, a second power splitter and a delay circuit. The second path, in sequence, includes a delay circuit, a distortion detecting power combiner, a second vector adjuster and an error amplifier. The distortion detecting power combiner combines a portion of a signal from the first path with a signal in the second path. Each vector adjuster adjusts amplitude and phase of a signal in each path. A distortion suppression power combiner synthesizes a signal in the first path with a signal in the second path. Control is included for stopping operation of the error amplifier or main amplifier based on a predetermined condition.